

# **DOW UNIVERSITY OF HEALTH SCIENCES, KARACHI**



# **TENDER DOCUMENT**

## **TITLE OF THE JOB**

**CONSTRUCTION OF ADDITIONAL 5TH FLOOR  
WITH LIGHT WEIGHT STRUCTURE ON THE  
EXISTING BUILDING OF DOW MEDICAL  
COLLEGE, DUHS, KARACHI**

**NIT # DUHS/P&D/2018/9330  
DATED: APRIL 30, 2018**

**OFFICE OF DIRECTOR PLANNING & DEVELOPMENT  
DOW UNIVERSITY OF HEALTH SCIENCES,  
BABA-E-URDU ROAD, BESIDES CIVIL HOSPITAL, KARACHI  
TEL / FAX # 021-99216065  
E-MAIL: [rahim.khan@duhs.edu.pk](mailto:rahim.khan@duhs.edu.pk)**

**SUBJECT: CONSTRUCTION OF ADDITIONAL 5TH FLOOR WITH LIGHT WEIGHT STRUCTURE ON THE EXISTING BUILDING OF DOW MEDICAL COLLEGE, DUHS, KARACHI”**

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To,

**THE PROJECT DIRECTOR**  
Planning & Development Department,  
Dow University of Health Sciences, Karachi.

1. Having examined the tender documents including Instructions to Bidders, Bidding Data, and Conditions of Contract, Specifications, Drawings and Bill of Quantities for the execution of the above-named work, we/I, the undersigned, offer to execute and complete the work and remedy any defects therein in conformity with the Conditions of Contract, Specifications, Drawings, Bill of Quantities for the sum of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) or such other sum as may be ascertained in accordance with the said conditions.

2. We/I understand that all the Appendices attached hereto form part of this bid.

3. As security for due performance of the undertakings and obligations of this bid, we/I submit herewith a bid security in the amount of Rupees \_\_\_\_\_ (Rs. \_\_\_\_\_) drawn in your favour or made payable to **Dow University of Health Sciences (DUHS)** and valid for a period of \_\_\_\_\_ days beginning from the date, bid is opened.

4. We/I undertake, if our bid is accepted, to commence the works and to complete the whole of the works comprised in the contract within the time stated in Appendix-A to Bid.

5. We/I agree to abide by this bid for the period of 60 days from the date fixed for opening the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

6. Unless and until a formal Agreement is prepared and executed, this bid, together with your written acceptance thereof, shall constitute a binding contract between us.

7. We do hereby declare that the bid is made without any collusion, comparison of figures or arrangement with any other bidder for the works.

8. We understand that you are not bound to accept the lowest or any bid you may receive.

9. We undertake, if our/my bid is accepted, to execute the Performance Security referred to in Clause 10 of Conditions of Contract for the due performance of the Contract.

10. We confirm, if our bid is accepted, that all partners of the joint venture shall be liable jointly and severally for the execution of the Contract and the composition or the constitution of the joint venture shall not be altered without the prior consent of the procuring agency.

In the capacity of \_\_\_\_\_ duly authorized to sign Bids for and on behalf of  
Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_

**Signature:** \_\_\_\_\_

\_\_\_\_\_  
**(Name of Tenderer in Block Capitals)**

**(Seal)**

**Address:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Witness:**

**Signature:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_

\_\_\_\_\_

**Occupation:** \_\_\_\_\_

## APPENDIX-A TO TENDER

1	Amount of Performing Security	2.5% of the Contract price. Total amount including performance security and retention money deducted from bills 5% of contract price stated in Letter of Acceptance.
2	Time for Furnishing Programme (Commencement of Work)	Within _____days from the date of receipt of Letter of Acceptance.
5	Time of Commencement	Within 10 days from the date of receipt of Project Director's Notice to Commence, This shall be issued after signing of Contract Agreement.
6	Time of Completion of Works	08 Months days from the date of Notice to Commence.
7	Amount of Liquidity Damages/ Delay Damages / Penalties	0.1% per day of Contract Price for the work remains un-commenced and un-completed after due date up to maximum of 10% of Contract price and after that termination of contract after 07days notice.
8	Defect Liability Period/ Period of Maintenance	90 days from the effective date of Taking over/ Completion Certificate.
9	Percentage of Retention Money	10% of the amount of the Interim/Running Payment Certificate.
10	Limit of Retention Money	5% of Contract Price stated in Letter of Acceptance.

**Signature of Contractor /Seal of Firm  
Authorized representative of Firm**

## INSTRUCTIONS TO TENDERS

- a) Project Director Planning & Development, Dow University of Health Sciences, calls tenders for the **“CONSTRUCTION OF ADDITIONAL 5TH FLOOR WITH LIGHT WEIGHT STRUCTURE ON THE EXISTING BUILDING OF DOW MEDICAL COLLEGE, DUHS, KARACHI”** with the bill of quantities attached here to be submitted by or before 11:00 A.M on **26-05-2018**. Tenders cost will not be reimbursed for any cost of any kind whatsoever incurred in connection with the preparations and submission of their tenders.
- b) The tender for the each work should be in the sealed envelope bearing name of the work / contractor / firm clearly marked and addressed to Project Director Planning & Development, Dow University of Health Sciences, Karachi.
- c) The tender may be delivered in person or sent by registered mail so as to reach on or before the date and time stated above. Any tender received after the stipulated time will not be considered regardless of the cause of delay.
- d) All tender are invited to the present for the opening of the tender in **26-05-2018** at 11:30 A.M. The name of each tenderer and his total contract price only will be read aloud and recorded.
- e) Any tender/tenders without earnest money will not be entertained. Earnest money of the awarding firm may be return after successful completion of work. If the supplier fails to commence or complete the awarded work within the stipulated time his/her work order will be cancelled as per rule and earnest money shall also be forfeited.
- f) Detailed particulars of the work / works can be seen in the Project Director Office on any working day during the office hours.
- g) Tender shall be made in the form supplied therefore, with all items and blanks properly filled in. all data and figures and the signature of persons signing the tender shall be in ink. The completed BOQ should be without interlineations, alterations or erasures but if these are necessary to correct errors made by the tenderer, person(s) signing the tender shall initial them. Conditional tenders will not accepted.
- h) All unit prices filled in the schedule of quantities shall be firm. The unit prices against each item of work and estimate amount and all other data called for shall be given.
- i) All prices quoted shall be deemed to include all costs of performing the works, including labour, material, income tax, duties, octori charges, royalties permit etc. and no claim whatsoever shall be accepted in case of escalation any or all prices entered in rate of bid.
- j) The actual sum to be paid to the contractor whose tender is accepted shall be determined by measuring the work actually done or supplying/repairing the actual number of items in accordance with the work order and valuing it al the rate or prices by the contractor in the tender.
- k) “In-case of discrepancy between the unit price and amount entered for any item in the schedule of quantities, the unit price will be taken as correct and the amount will be adjusted accordingly when the tender is being examined”.
- l) 10 % security deposit will be deducted from each bill on the paid amount of the contract, which will be returned after maintenance period of 03 months.
- m) The tender must be signed in each and every page by a person(s) authorized to do so.

- n) The site can be visited on any working day during the office hours.
- o) “Engineer” means the Project Director Planning & Development of the University or any other Engineer appointed by him.
- p) The earnest money will be forfeited in case the contractor fails to commence the work within 10 days time after issue of work order or left the work incomplete after commencement and during execution.
- q) The Competent Authority reserve the right to reject any or all the tenders, increase or decrease the scope of work or divide item of work among bidders.
- r) That the Contractor shall be responsible to keep in good condition the premises of the University and shall not damage any property belonging to student of the University and incase of any loss damage caused by the contractors or its employee to any property of the compensate and or indemnify the university or the student as the case may be.

**PROJECT DIRECTOR**  
Planning & Development Department  
Dow University of Health Sciences, Karachi

# **DOW UNIVERSITY OF HEALTH SCIENCES, KARACHI**

## **DIRECTORATE OF PLANNING & DEVELOPMENT**

### **TERMS & CONDITIONS**

1. The work / supply is required within 10 Days from the date of letter of Commencement/award.
2. Inspection: *Nominated Inspection Committee will make Inspection of Work.*
3. In case of late delivery @ 0.1% per day will be charged on bid amount deducted from the bill, but not more than 10% of contract value.
4. Quantities shown in the quotation are approximate and no claim shall be entertained for quantities of executed being 30% more or less than those entered in the BOQ.
5. All prices will include all costs of performing the works including labour, material, Income Tax, GST, Octroi Charges, royalties & transportation etc., as mentioned in BOQ.
6. No subletting of all or any part of work will be allowed at any cost / reasons.
7. The supplier will see the site / sample before quoting the rates.
8. Store will be delivered at Dow University of Health Sciences, Karachi.
9. Central Stores and Inspection Officer will issue inspection certificate after inspection through Inspection Committee.
10. If the work / supply is not found according to the specification and samples provided, will be rejected at risk and cost of the manufacturer and in case the manufacturer fails to work / supply the order, the firm will be black listed.
11. Payment:
  - 11.1 The Actual sum to be paid shall be determined by quantifying / measurements of items actually supplied valuing it at the rates/prices quoted in the approved quotations.
  - 11.2 10% security deposit will be retained from each bill upto a period of six months from the date of supply of order.
  - 11.3 Part payment against part supply can be allowed.
12. Request letter for issuance of tender documents should be supported with:
  - a. Copy of GST, SST & NTN registration Certificate and PEC Registration in appropriate category with the following codes BC01 – BC02 – BC03 – CE01 – CE02 – CE04 – CE09 – CE10 – EE01 – EE02 – EE04 – EE06 – EE07 – EE08 – ME02 – ME03 – ME06. **(MANDATORY)**
  - b. Copies of all relevant Certificate/Authorization letter must be attached (where required) mentioned with Tender Enquiry.
13. The bidder must have done at least five (05) contracts of similar nature and magnitude “Similar nature means Construction of Building preferable at educational institutes and hospitals” (Please submit copy of PO/Contract Agreement/Notification of Award). Comply with specifications mentioned in bidding documents.
14. The Bidder should not have been barred of any of provincial or federal Govt. Deptt Agency, organization or autonomous body or private sector organization anywhere in Pakistan. (Submission of undertaking on 100/- legal stamp paper). All the proposed reports should be well known for its quality, performance and reliability.
15. The bidder must have turnover/sales exceeding **800 Million** in PKR annually in any of last three years (Submission of Audited Annual Reports or reputable Bank confirmation letter.

16. Latest income Tax Certificate (NTN), valid GST Registration Certificate and valid SRB registration.

**PROJECT DIRECTOR**  
Planning & Development Department  
Dow University of Health Sciences, Karachi



**CONSTRUCTION OF ADDITIONAL 5TH FLOOR WITH LIGHT  
WEIGHT STRUCTURE ON THE EXISTING BUILDING OF DOW  
MEDICAL COLLEGE, DUHS, KARACHI**

**BILL OF QUANTITIES**

**A B S T R A C T**

1	CIVIL WORK	
2	INTERNAL WATER SUPPLY	
3	INTERNAL ELECTRIFICATION	
4	AIR CONDITIONING WORK	
5	FIRE ALARM SYSTEM	
6	DATA & VOICE CABLING SYSTEM	
7	LIFT	
<b>GRAND TOTAL RS.</b>		

\_\_\_\_\_  
**CONTRACTOR**

**PROJECT DIRECTOR**  
Dow University of Health Sciences, Karachi

**CONSTRUCTION OF ADDITIONAL 5TH FLOOR WITH LIGHT WEIGHT STRUCTURE ON THE EXISTING BUILDING OF DOW MEDICAL COLLEGE, DUHS, KARACHI**

**BILL OF QUANTITIES**

Sr.#	Description of Item	Quantity	Rate	Unit	Total
	<b><u>(i) Civil Work</u></b>	-	-	-	-
1	Dismantling of Existing flooring / skirting i/c C.C layer and disposal of rubbish materials by mean of Tractor Trolley	500 .00		P.Cft	
2	Dismantling of Existing Block Masonry and disposal of rubbish materials by mean of Tractor Trolley or Dumper	2,2 07. 00		P.Cft	
3	Dismantling cement concrete reinforced separating reinforcement and disposal of rubbish materials by mean of Tractor Trolley or Dumper	3,2 40. 00		P.Cft	
3.1	Dismantling c.c 1:2:4 cement concrete and disposal of rubbish materials by mean of Tractor Trolley or Dumper	11, 500 .00		P.Cft	
4	Providing and laying Class 'D' 1:3:6 cement concrete Solid Block Masonry wall 4" to 8" in thickness and above set in 1:6 cement sand mortar in ground floor superstructure i/c racking of joints and curing, etc, complete.(Minimum crushing strength 1300-lbs/P.S.I)				
	<b>150 mm Thick</b>	2,5 00		P.Sft	
	<b>100 mm Thick</b>	1,8 00		P.Sft	
5	Providing and fixing G.I. sheet chowkats of 18 gauge for doors i/c pouring C.C.				

	1:2:4 inside chowkat & coat of red oxide paint etc complete in all respect.				
<b>b.</b>	<b>2-1/4" x 7.5"</b>	200		P.Rft	
<b>c.</b>	<b>2-1/4" x 5.5"</b>	75		P.Rft	
<b>5.1</b>	Providing making and fixing Burma teakwood frame best quality 2"x5" as per approve by architect or engineer complete in all respect	450		P.Rft	
5.2	Providing making and fixing Burma teakwood picture railing 2-1/2"x1/2" e.t.c complete.	500		P.Rft	
6	Providing and spraying pesticide solution of approved manufacturer inside building line in Two stages i.e. on floor base & all wood work etc, using "Agenda" or equivalent of Jaffer Brothers water mixed solution as per specifications and approval of Engineer.	15,000.00		P.Sft	
7	Cement Concrete Plain including placing compacting, finishing and curing complete (including screening and washing of crush bajri) without form work etc complete in all respects as per specifications provided and instructions given by the Engineer Incharge				
	<b>Ratio 1:4:8 (CLASS 'E')</b>	250.00		P.Cft	
8	Cement Plaster in Ratio 1:6 (15 mmThick) i/c floating coat of cement in proper design & profile on walls/beams & columns .This rate also i/c providing expanded metal at the joint of R.C.C.members and block masonry where as required etc complete in all				

	respects as per specifications and drawings and approval of Engineer Incharge				
(i)	<b>15 mm thick Internal / External</b>	6,5 80		P.Sft	
9	Cement Plaster in Ratio 1:4 (13 mmThick) i/c floating coat of cement in proper design and profile on walls, beams & columns etc complete in all respects as per specifications and drawings and approval of Engineer Incharge				
(i)	<b>13 mm thick Internal / External</b>	6,5 80		P.Sft	
10	Providing & fixing Colour Crete to wall surface to provide, durable crust and aesthetics having thickness up to 1/2" with specified colour having water, fire <sup>3</sup> and temite resitance over the base of 1/2 " thick cement plaster ratio (1:4)				
		15, 000		P.Sft	
11	P/L C.C cement concrete 1:2:4 under floor including surface finishing etc complete.	10, 500		Cft	
13	Providing & fixing Graphic Wall Decorative Plaster to provide, Durable Crust and Acrylac Finish having thickness up to 13 mm with specified colour having water, fire <sup>3</sup> and termite resitance over the base of 15mm thick cement plaster ratio 1:4	450		P.Sft	

14	Providing and fixing Printed Granite Porcelain Tiles Flooring (24"x 24" x 1/2" or above ) jointed in white cement and laid over bed of 1"to 2" thick grey cement concrete bed in ratio 1:2:4 i/c washing / filling of joints with white cement etc: complete in all respect (Imported Premium Quality costing Rs 1800 per meter or above)				
<b>a</b>	<b>Flooring</b>	10, 500		P.Sft	
<b>b</b>	<b>Wall Dado</b>	1,1 45		P.Sft	
<b>c</b>	<b>6" Wide Wall Border</b>	2,2 35		P.Rft	
15	Providing and fixing Printed Glazed Ceramic Tiles Flooring (12"x18"x1/4" or above ) jointed in white cement and laid over bed of 1/2"thick grey cement send mortar ratio 1:3 i/c washing / filling of joints with white cement etc: complete in all respect (Imported Premium Quality costing Rs 1600 per square meter or above )				
	<b>Wash Rooms Flooring</b>	665		P.Sft	
16	Providing and fixing Printed Glazed Ceramic Tile Dado/ Skirting (12"x18"x1/4" or above ) i/c two layers of Printed Borders (2" to 4"Wide) jointed in white cement and laid over bed of 1/2"thick grey cement send mortar ratio 1:3 i/c washing / filling of joints with white cement etc: complete in all respect. (Imported Premium Quality costing Rs 1600 per square meter or above )				
	<b>Wash Rooms Wall Dado ( F.Floor)</b>	1,3 80		P.Sft	

17	Applying 3 Coats of Silk Matt Finishing with primary coat and preparing base surface and filling where as required as per requirement of Architecture Drawings and specifications etc complete in all respects as per directives of Engineer In charge.	13,500		P.Sft	
18	P/Applying 3 Coats of Wheather Sheild Paint of superior quality i/c preparing base surface and filling etc complete in all respects as per directives of Engineer In charge	235		P.Sft	
19	Providing and fixing in position Doors Shutter 1-1/2" thick Teak wood ply shutters of first class partal wood skeleton (Solid) styles and rails core of partal wood and Teak ply sheet (3 ply) on both sides including frost glass of 3 mm on top,partal wood lipping around shutter, hold fasts, hinges, iron tower bolts, handles and cleats with cord etc, complete.	625		P.Sft	
20	Providing and fixing with sunk iron screws Oak Wood Architrave approved design/shape having width not less than 2-1/2 inches i/c french polishing etc complete as directed by Engineer Incharge.				
	<b>2-1/2" Thick</b>	1,030		P.Rft	
21	Providing and Applying French polishing over wood work with liqueur base spirit polish and filling material etc complete in all respect	1,250		P.Sft	
22	Providing and fixing C.P Brass Mortice Lock with	35		Each	

	Round Handle ( Imported)				
23	Providing and fixing C.P Brass Mortice Lock with Long Handle (Heavy Design Imported)	10		Each	
24	Providing and fixing C.P Brass Tower Bolt 24" Long (Heavy Design Imported) as approved by the Engineer.				
	<b>24" Long</b>	24		Each	
	<b>12" long</b>	36		Each	
24.1	P/f imported door closer as per approve by engineer complete.	50		Each	
25	S/F in position Aluminum box channels framing (100 mm x 40 mm) for office chamber partitions i/c Alminium hinged doors of Alcop made (of approved make and design) with Aluminium Sheet 3 mm on bottom up to 300 mm height , 5 mm thick tinted frost glass glazed on remaining portion (Belgium) , imported Door Closer over Door and Alpha (Japan) locks including handles stoppers etc complete in all respects as per directives of Engineer Incharge.( <b>Prime / Chawla or Equivalent</b> )	250		P.Sft	
26	S/F in position Aluminum box channels framing (100 mm x 40 mm) for Aluminum Doors of Alcop made (of approved make and design) with Aluminum Sheet 3 mm on bottom up to 900 mm height , 5 mm thick tinted frost glass glazed on remaining portion (Belgium) , imported floor hinge two way pivot machine and Alpha (Japan) locks including handles stoppers etc complete in all respects	185		P.Sft	

	as per directives of Engineer In charge. <b>(Prime/ Chawela or Equivalent)</b>				
27	S/F in position Almuniums channels framing (100mm x 40 mm) for sliding windows & ventilator with collar of Alcop made (of approved make and design) with 5 mm thick tinted glass glazing (Belgium) and almunium fly screen channel including handles stoppers & locking arrangements etc complete in all respects as per directives of Engineer In charge <b>(Prime/ Chawla or Equivalent)</b>	1,3 45		P.Sft	
28	Providing and laying Pre-Polished best quality imported granite beveled edges on staircase treads having 50mm wide unpolished strip, laid over concrete base over 40 mm thick concrete base (1:4) complete in all respect as per detail/ drawing and as directed by the Consultants. (Basic cost of Granite Should be Rs.800.00 per Sq ft or above)				
	<b>Reception / Vanity / Kitchen Counter 25 mm</b>	250		P.Sft	
29	Providing & applying smooth 3/4" thick to walls columns etc. with 1:4 cement ratio, i/c all corners, recesses, jambs & raking out joints along with (Pudlo- 2 kg per bag of approved quality) complete as per drawings, specifications & as per instructions of Consultant/ Engineer In-charge.	800		P.Sft	



30	Supplying and fixing False Ceiling of gypsum sheet (4'-0"X 2'-0"imported) inpanels including making frame work of imported Aluminium 'T' Channels etc complete as per drawings, specifications & as per instructions of Consultant/ Engineer In-charge.	6,7 30		P.Sft	
31	P/F Decorative False Ceiling of first quality MDF Lassani boards of various thicknesses ( 3/4" , 1/2" & 3/8") with wooden logs as per requirement of Architecture Drawings and specifications provided i/c decorative paint or French polish as required and also making excess for decorative false ceiling LED Lights etc complete in all respects as per directives of Engineer In charge	1,1 35		P.Sft	
32	Supplying & fixing window printed blinds (Horizontal / Vertical ) with printed design and of approved colour i/c fixing in windows with necessary assessories.etc complete in all respects as per directives of Engineer In charge.	465		P.Sft	
33	Providing and fixing Hand Printed Kashi Ceramic Irani Pattern Tiles( Size 8" x 12" or above) on wall facing or in dado jointed in white cement and laid over bed of 1/2"thick grey cement send mortar ratio 1:3 i/c washing / filling of joints with white cement etc: complete in all respect.(Premium Quality costing Rs 15,000 per square meter or above)	485		P.Sft	
34	P/f iron steel grill 3/8"x3/8" sold rod round or ssquare and 3/4"x 2/8 flate i/c welding color e.t.c complete	550		P.Sft	

	in all respect.				
33	<p><b>LIGHT GAUGE STRUCTURAL STEEL</b>  Providing fabricating and fixing light gauge structural steel in walls. Partition Walls, Roof Truss, Roof frames, bracings, columns etc. all framing element with C-Section having profile 89mm x41mm x 0.75mm thick (Manufactured by Framacad or Equivalent) GI Prime Quality Steel G550 with coating of Z-275 g/m2 conforming to ASTM A653 or equivalent hot dipped galvanized including imported approved quality screws for the connection of elements and all other part required for the fixing complete in all respect as per design / drawings and specification and as per instructions of the Project Manager / Project Engineer / Consultant.All primary steel shall be used Z275 Spangled Galvanized G550.All structural steel to be fastened by screw having E-Coat 1000 hrs AS 3566.2 2002 coating class 3 in Accordance with ASTM B117.All fiber cement board to be fixed by screw Suitable for fixing 4.5mm to 18mm for Cladding. Finish:E- Coat Green 1000 hrs –ASTM B117, Coating class AS 3566.2 2002.3</p>				
	<p><b>ACCESSORIES &amp; EXPANSION BOLTS</b>  Accessories anchoring bolt Hilti / Fischer, self drilling screws, silicon GE, Truss Joints, Foot Cleats, Strap Bracing, Hurricane Strap, all kind of Galvanized fixing accessories. Expansion Bolts / Studs 12mm x 120mm in the existing slab / approved</p>				

	<p>by the Engineer complete in all respect as per design / drawings and specification and as per instructions of the Project Manager / Project Engineer / Consultant.</p>				
	<p><b>EXTERIOR &amp; INTERIOR WALL CLADDING</b>  Fiber Cement board shall be asbestos free and approved Boards are SHERA / Knof / Everest.  Jointing material shall be used imported Cemstar Cement Bonding Compound.  Providing and fixing Exterior and Interior wall cladding, non asbestos fiber cement boards (Shera / Knof / Everest) conforming to ASTM C1186 or better alternative as approved by the Engineer shall be used.  The thickness of cladding should not be less than 10mm for both interior and exterior walls. The vertical and horizontal joints between cladding boards shall be made water tight using Cemstar jointing material for interior and Exterior wet area. specification as per instructions of the Project Manager / Project Engineer / Consultant.</p>				
	<p><b>Wall Insulation</b>  Providing and Filling Insulation of complete external and partition walls shall be done by 70mm thick Resinated Rock Wool Rigid Board 80Kg/m3 density for optimum heat and sound insulations as per design / drawings and specification as per instructions of the Project Manager / Project Engineer / Consultant.</p>				

	<p><b>50mm thick Sandwich Panels for Roof:</b> Polyurethane thickness: 50mm thick. External Cladding: Corrugated Galvanized preprinted Alu Zinc (AZ 100) sheets of 0.5mm thick. Insulation: 50mm polyurethane (PU density 35 ~ 42 Kg/m<sup>3</sup>) without Joints. Internal Cladding: Micro corrugated Galvanized pre-printed sheet of 0.5mm thick. complete in all respect as per design / drawings and specification. All Rigid Cap, flashing, Valley Gutter &amp; Downspout Pipe shall be provided.</p>				
	<p><b>Installation and Transportation</b> Installation, Transportation and crane charges. Total Covered Area</p>	<p>10, 100 .00</p>		<p>P. Sft</p>	
	<p>Supply &amp; Fixing M.s staircase double light i/c foundation and G/F to 5th Floor and opening emergency gate installation 4'-0"x7'-0" with all accessories handle lock etc staircase steel structure "C" Section 4" or 6" ht 25 swg all steps and landing amkeing in checker plate 12 swg size of step 4'-0" length with 1-1/2" x angle 3/16. M.S railing 1-1/2" dia 16 swg post pipe 1" dia 16 swg horizontal pipe, welding, scaffolding M.S ansor bolt color wtc complete ion all respect as per engineer.</p>	<p>170 .00</p>		<p>Rft</p>	
<b>TOTAL</b>					

**BILL OF QUANTITIES****INTERNAL WATER SUPPLY**

Sr #	Description	Quantity	Unit	Rate	Amount
				Rs.	Rs.
1	Providing and fixing G.I pipes afittings medium quality complying to BSS 1387 (1985) shall be workable on 70PSI working pressure and all piping/fittings shall tested on 125PSI as indicated on the drawing and as specified and as directed by the Engineer.				
	(a) 1/2" dia	1,000.00	P.Rft		
	(b) 3/4" dia	450.00	P.Rft		
	(c) 1" dia	750.00	P.Rft		
	(d) 1-1/4" dia	250.00	P.Rft		
	(e) 2" dia	435.00	P.Rft		
2	Providing and laying unplasticized polyvinyl chloride (UPVC) Class D Pipes for soil, waste, and ventilating pipes, as specifications and drawings complete in all respect and as approved by the Engineer.				
	(a) 75mm	300.00	P.Rft		
	(b) 110 mm	1,200.00	P.Rft		
3	Providing and fixing European W.C medium quality of ICL , Bosh or equivalent as specified and shown on the drawing complete in all respects and as approved by the Engineer.	10.00	Each		
4	Providing and fixing wash basin of medium quality of ICL Bosh or equivalent as specified and shown on the drawing, complete in all respects	10.00	Each		

	and as approved by the Engineer. Pedestal Type				
5	Glazed earthen ware pedestal for Wash Basin	10.00	Each		
6	P/F Soap Dish standard size Master economy type or equivalent as specified and shown in the drawing and as approved by the Engineer.	10.00	Each		
7	P/F Toilet Paper Holder standard size Master economy type or equivalent as specified and shown in the drawing and as approved by the Engineer	10.00	Each		
8	P/F 3/4" dia CP towel rails of length 2-1/2 ft Master economy type or equivalent as specified and shown in drawings and as approved by the Engineer.	10.00	Each		
9	P/F washbasin mixture with crystal heads (Master)	10.00	Each		
10	P/F Double Bib Cock with crystal heads (Master)	10.00	Each		
11	P/F Muslim Shower including brass screw etc complete (Master)	10.00	Each		
12	P/F Shower Rod (Master)	10.00	Each		
13	P/F Shower Rose (Master)	10.00	Each		
14	P/F Shower Mixture including brass screw etc complete (Master)	10.00	Each		
15	P/F Long Bib Cock with crystal heads (Master)	10.00	Each		

16	P/F 6"x2" or 6"x3" C.I floor Trap of the approved self cleaning design with a C.I screwed down grating with or without a vent arm complete with & i/c making requisite number of holes in walls, plinth & floor for pipe connections and making good cement concrete 1:2:4.	25.00	Each		
17	P/F 1/2" dia nylon connection pipe.	30.00	Each		
18	P/F T Stop Cock with crystal head (Master)	30.00	Each		
19	Providing and fixing Belgium glass with chromium plated screws and 5mm thick hardboard as specified and shown on the drawing and as approved by the Engineer.	10.00	Each		
20	P/F Handle valve complete of size mentioned below.				
	(a) 1" Dia	6.00	Each		
	(b) 3/4" Dia	8.00	Each		
	(c) 1/2" Dia	10.00	Each		
21	P/F Upvc "Y" tee including solution etc complete				
	4" Dia	20.00	Each		
22	P/F Upvc Bend 45° including solution etc complete				
	4" Dia	20.00	Each		
23	P/F Upvc Bend 90° including solution etc complete				
	4" Dia	20.00	Each		
24	P/F Upvc socket including solution etc complete				
	4" Dia	25.00	Each		

25	P/F Upvc Plug T including solution etc complete				
	4" Dia	20.00	Each		
26	P/F Upvc Plain T including solution etc complete				
	4" Dia	20.00	Each		
27	P/F Upvc Plug Elbow including solution etc complete				
	4" Dia	20.00	Each		
28	P/F Upvc Cowel including solution etc complete				
	4" Dia	15.00	Each		
29	P/F UPVC Clip including nails etc complete.				
	(a) 4" dia	20.00	Each		
<b>TOTAL</b>					



**BILL OF QUANTITIES****INTERNAL ELECTRIFICATION**

Sr #	Description	Quantity	Unit	Rate	Amount
				Rs.	Rs.
	-				
1	<b>Circuit Wiring, Point Wiring &amp; Wiring for Outlets</b>				
	Supply, Installation, testing & commissioning of circuit wiring from DB to switch board including wiring between switch on the same circuit with 1-C PVC insulated wires 2x2.5 sqmm, + 1x1.5 sqmm as ECC in 25 mm dia PVC conduit concealed in wall, column / ceiling etc. including conduit accessories complete in all respect.	57.00	Nos.		
2	Supply, Installation, testing & commissioning of wiring for light point from switch board to point with 3x1.5 sqmm. Wires in 25mm dia PVC conduit, complete in all respect.	450.00	Nos.		
3	Supply, Installation, testing & commissioning of wiring for light point to point with 3x1.5 sqmm. Wires in 20mm dia PVC conduit, complete in all respect.	90.00	Nos		
4	Supply, Installation, testing & commissioning of wiring for 5 A outlet with 2 Nos. 2.5 sqmm + ECC 1.5 sqmm single core PVC insulated wires from nearest available circuit in 25mm dia. PVC conduit recessed in wall, column, ceiling etc. complete with all conduit accessories.				
	DB to outlet	28.00	Nos		
	outlet to outlet	240.00	Nos		
5	Supply, Installation testing & commissioning of wiring for 13A/15A outlet with 2 Nos. 4sqmm + ECC 1.5sqmm single core PVC insulated wires from DB to outlet in 25 mm dia. PVC conduit recessed in wall, column, ceiling etc.complete with all conduit accessories as per drawing & specification.				

	DB to outlet	71.00	Nos.		
	Outlet to outlet	2.00	Nos.		
6	Supply, Installation, testing and commissioning of wiring for TV system with RG-6 coaxial cable in 25mm dia PVC conduit.	100.00	Rft		
	<b><u>Lighting Fixtures &amp; Fans:</u></b>				
7	Providing and installation of following lighting fixtures complete with ballast, starter p.f.i capacitor, high quality Driver and specified lamps. (Subject to approval of Architect / Consultant) Note: Color temperature shall be finalized as per Architect's / end user's approval.				
8	Recessed Down Light / Spot Light Fixture with 7W LED (COB Type), Color 3000K CRI 80 (Philips/OSAKA or equivalent) e.t.c complete	30.00	Nos.		
9	Recessed Down Light Fixture with 18W LED (COB Type), Color 3000K CRI 80 (Philips/OSAKA)	65.00	Nos.		
10	Recessed Down Light Fixture with 12W LED (COB Type), Color 3000K CRI 80 (Philips/OSAKA)	40.00	Nos.		
11	Surface Mounted Down Light Fixture with 18W LED (COB Type), Color 3000K CRI 80 (Philips/OSAKA)	25.00	Nos.		
12	Pendant Decorative Light Fixture with 17W LED (Lamp / COB Type), Color 3000K CRI 80 (Philips/OSAKA)	2.00	Nos.		
15	Recessed / Surface Mounted Emergency Light Fixture with 3W LED having Built-In battery pack unit.	20.00	Nos		

16	Recessed 40 - 48W LED Panel Light (Dimensions 2' x 2'), Color 4000K CRI 80 (OSAKA)	50.00	Nos		
17	Recessed 40W LED Panel (Dimensions 1'x4') clour 4000K CRI80.(Philips/OSAKA)	20.00	Nos		
18	Wall Mounted Light Fixture with 15W LED Lamp (IP-65) , Color 3000K CRI 80 (Philips/OSAKA/OSRAM)	15.00	Nos		
19	High Intensity LED Tape / Rope Light (Philips/OSRAM)	200.00	Rft		
20	Flood Light With 400 HPI-T Lamp (Philips)	2.00	Nos		
21	Ceiling / Surface Mounted Dust Proof Pacific Light fixture with 2x18W LED Lamp. (Philips/OSAKA)	25.00	Nos		
22	Surface mounted batten tube light fixture (2 ft.) with 10W LED Lamp, Color Temp 4000K make Philips or equivalent. (Philips/OSAKA)	2.00	Nos		
23	Surface mounted batten tube light fixture (4 ft.) with 18W LED Lamp, Color Temp 4000K make Philips or equivalent.	6.00	Nos		
24	10" dia exhaust fan.	5.00	Nos.		
	<b><u>Switches &amp; sockets:</u></b>				
25	Supply, Installation, termination and commissioning of following switches & sockets including 16 SWG sheet steel powder coated back boxes, recessed on wall.				
	One switch unit	46.00	Nos.		
	Two switch unit	1.00	Nos.		
	Three switch unit	36.00	Nos.		

	Four switch unit	98.00	Nos.		
	Fan dimmer	43.00	Nos.		
	5 A, 3 Pin switch sockets outlet	135.00	Nos.		
	13 A, 3 Pin switch socket outlet	130.00	Nos.		
	15 A, 3 Pin switch socket outlet	58.00	Nos.		
	TV, Outlet	2.00	Nos.		
26	<b><u>Main / Sub Main Cable:</u></b>				
	Supply, Installation, testing and commissioning of PVC insulated, PVC sheathed , 600/1000V grade armoured / unarmoured copper conductor cable 450/750 V grade PVC insulated wires.				
	4 nos. 1-C 25sqmm+1C 10sqmm as ECC	100.00	Rft		
	16sqmm single core pvc	150.00	Rft		
	70sqmm single core pvc	850.00	Rft		
	120 sqmm sing core pvc	1,500.00	Rft		
	<b><u>Conduits:</u></b>				
27	Supply, Installation & commissioning of following PVC conduit with all accessories recessed in wall / column / under floor complete in all respect.				
	25 mm dia	500.00	Rft		
	50 mm dia	200.00	Rft		
28	Supply, Installation, testing & commissioning of recessed / surface mounting type DB details given all items impotrtd e.t.c complete as per engineer and specification.				
	S.M.DB, 24"x24" led lamp,powder coated , MCC brecker 250 Amp 1 no,Brecker 125 Amp 4 no	1.00	Nos		
	DB, 24"x24" led lamp,powder coated , MCC brecker 100 Amp 1 no,Brecker 32 Amp 24 no T.P 63 amp 10	5.00	Nos		
<b>GRAND TOTAL</b>					

**BILL OF QUANTITIES**  
**Air Conditioning Work**

Sr #	Description	Quantity	Unit	Rate Rs.	Amount Rs.
1	<p><b><u>FIFTH FLOOR ADMINISTRATION BLOCK</u></b> Supplying, testing &amp; commissioning High ambient split type air conditions wall mounted with decorative grill electric-220 volt-50HZ,single phase capacity - 12000 Btu (1 Ton net capacity ) out Door condenser tube 360 psi tested evoprater 180 psi tested operation condition ambient 55 celicuse compressor T3 type tested on 60 celicuse ambient. i/c making holes with diamond bit, nut, bolts including cartage etc complete in all respect.</p>	15.00	Nos.		
2	Supplying, testing & commissioning High ambient split type air conditions wall mounted with decorative grill electric-220 volt-50HZ,single phase capacity - 18000 Btu ( 1.5 Ton net capacity ) out Door condenser tube 360 psi tested evoprater 180 psi tested operation condition ambient 55 celicuse compressor T3 type tested on 60 celicuse ambient. i/c making holes with diamond bit, nut, bolts including cartage etc complete in all respect.	30.00	Nos.		
3	Supply & installation of split type air condition copper pipe including aeroflex & control wiring etc complete.	3650.00	Rft		
4	Supply & installation angle iron stand as a foundation of split outer unit.	43.00	Nos.		
5	Supply & installation of following sizes of G.I Powder coated cable tray. 8" x 4"	300.00	Rft		
6	Supply & installation of 20amp DP safty breakers.	43.00	Nos.		
7	Supply & installtion of drain pipe UPVC including accessories such as bend, tees, etc complete in all respect of following sizes: 1" Dia 3/4" Dia	250.00 650.00	Rft Rft		
<b>Grand Total</b>					

**BILL OF QUANTITIES**  
**FIRE ALARM SYSTEM**

Sr.#	Description of Item	Qty	Rate	Unit	Amount (Rs.)
1	Intelligent Addressable Photoelectric smoke detector Programmable Sensitivity range 0.2% to 3.7% / ft obscuration Along with standard Base with output for remote LED (UL, ULC listed & FM approved) SIMPLEX, USA or equlant complete in respect.	80.00		No.	
2	Standard Base With Output For Remote LED (UL, ULC Listed & FM Approved) SIMPLEX, USA or equlant complete in respect.	80.00		No.	
3	Intelligent Addressable type Heat Detector Programmable fixed temperature range is 57.2° C / 68° C or rate-of-rise temperature range is 18.3° C / 11.1° C Along with standard Base with output for remote LED ( UL, ULC listed & FM approved) SIMPLEX, USA or equlant complete in respect.	4.00		No.	
4	Standard Base With Output For Remote LED (UL, ULC Listed & FM Approved) SIMPLEX, USA or equlant complete in respect. 49AV-WRF AV	4.00		No.	
5	Intelligent addressable horn cum multi-candela strobe unit, customization of intensity selection from 15cd to 185cd of strobe with self-test diagnostic feature which is able to generate nac pass / fail report. ul, ulc listed & fm approved simplex, usa or equlant complete in respect.	20.00		No.	
6	English Call Point With LED. Single Action Push Break Glass Station Along With Surface Mount Box(UL LISTED FM APPROVED) SIMPLEX, USA or equlant complete in respect.	24.00		No.	
7	Installation charges with material and labor including 1.5 mm2 fr cable, pvc pipe & fittings	1.00		Job	
<b>Grand Total</b>					

**BILL OF QUANTITIES**  
**DATA & VOICE CABLING SYSTEM & FIRE ALARM SYSTEM**

Sr.#	Description of Item	Qty	Rate	Unit	Amount (Rs.)
	<b><u>DATA &amp; VOICE CABLING SYSTEM:-</u></b>				
1	Supply & installation of following 0.6 mm dia. Shielded AT & T / Clipsal STP 3m or equlant cables in 25 mm dia PVC conduit.				
2	(a) Cat - 6 Telephone cable 50 pair. Indoor	1,230.00		P.Mtr.	
		560.00		P.Mtr.	
3	Supply & installation of following boards as per drawings fabricated from 16 SWG sheet steel powder coated box with hinged covered door. a)Telephone Junction Box with ( 100 ) pair punch block) .	1.00		Each	
4	Supply & installation of following telephone outlets (i/o + Face Plate) with back box.(clipsal or equlant). a) RJ-45 for telephone system. b) RJ-45 for Data system. c) RJ-45 for Data system. (Duplex)	60.00 60.00 25.00		Each Each Each	
5	Supply and installation of Cat-6 giga speed cable AT & T /clipsal 3m or equlant for data system in 25 mm dia PVC conduit .	650.00		P.Mtr.	
6	Card Access Control System	3.00		Each	
7	Wiring for Card Access	3.00		Each	
8	Supply/ Fixing of Industrial UPS 5 Kva i/c wiring with dry battery and neccessary angle iron bracket for errecting UPS (Imported) 15 mint.back	2.00		Each	
9	Following CAT-6, Patch Panels equipped with RJ-45 I/Os for Data communication system with rear cable organizer including all labeling and all mounting accessories. Complete in all respects. 24-port CAT-6 patch panel for data	9.00		Each	
10	Following CAT-6, Patch Panels equipped with RJ-45 I/Os for voice communication system with near cable organizer i/c all labelling system and all mounting accessories etc complete in all respects. 24-port CAT-6 patch panel for Voice	2.00		Each	
11	Front Cable Organizer for Voice & Data patch panels / wiring blocks with complete labeling and dressing for incoming cable management.	2.00		Each	
12	Following CAT-6 , factory certified patch cords of specified color having RJ-45 connectors at both ends for voice communication. AT & T Clipsal 3m or equlant e.t.c complete a). 3 meter long. b). 1 meter long.	25.00 50.00		Each Each	
13	Supply, Installation, testing and commissioning of Data Switch (10G) for Cat-6 Cable.	1.00		Each	

14	Supply / Installation of 42 U Floor mounted Communication Rack. suitable for installation of servers,switches and related equipment etc. Complete with vertical cable managers with at Rack shall be equipped with power distribution units (PDUs) least 5 imported power sockets etc complete in all respects.	1.00		Each	
15	Testing and commissioning of all above items termination and connectivity at both ends, including submission of detailed test report from the Principals.	1.00		P.Job	
				<b>TOTAL</b>	



**BILL OF QUANTITIES  
S/F/I/C OF PASSENGER LIFT**

Sr #	Description	Qty	Rate	Unit	Amount
	<p>Supplying and fixing imported Passenger lift (MR) with 800Kg loading capacity &amp; speed 1.0 m/s 09 stops served 5 Floors shaft size 6'-0"x6'-0" and travel ht 70 ft. having gearless machine VVVF Drive type alongwith car protective device, include VVVF car door operator with Panasonic drive or equivalent, hairless s/s 304 finish material on car door, landing doors and car with machine power 380/3p/50hz light 220/1p/50hz. Basic Function: Emergency light cut off the illumination &amp; fan overload detector arrive gone, attendant operation cancel error indicate function, Auto rescue system .Three way phone. include fireman operation and 'fireman return operation' in basic functions. Universal completely integrated controller and inverter CE/TUV certified. Counterweight frame, counter weight blocks and all other materials should be completely imported. No local material should be used.</p>	1		Job	
<b>Grand Total</b>					